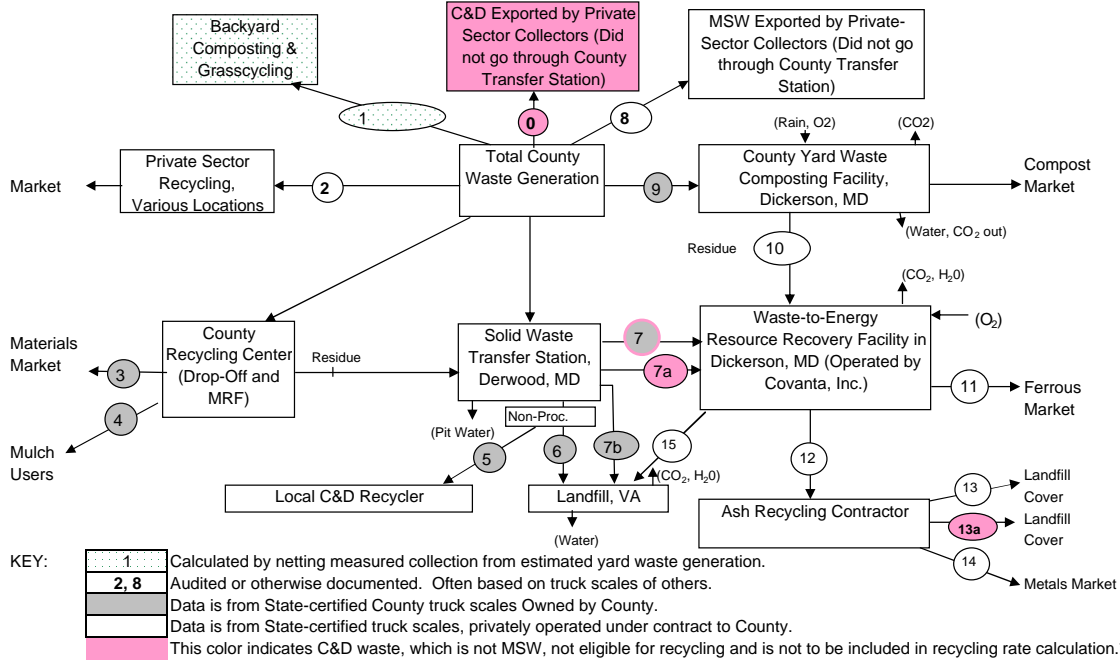


MATERIAL FLOW DIAGRAM Fiscal Year 2011



Total Waste Generation, Including C&D Exported by Private Sector	1,342,836
County-Managed Waste (CMW) = 1 + 2 + 3 + 4 + 5 + 6 + 7 + 7a + 7b + 8 + 9 =	1,236,539
MSW Generated (above less streams 5, 6 and 7a)	1,120,143

Stream No.	Material Description	Sources of Data	Total (tons/yr)	Comments
0	Construction & Demo Debris Private Export	Licensed Collector Reports under ER 92-59	106,297	Not County-managed and not eligible for recycling
1	Yard Waste Source Reduction	Calculated w/ estimates & measurements	35,600	17.5% of MSW less leakage less yard waste facility tons
2	Recycled via non-County Facilities	Collector, Processor, Business & Self-Hauler Rpts.	229,044	Filtered to avoid double-counting
3	County Recycling Facility Material Sales	County TS & MRF Scales, Outbound	87,515	Outgoing to Market from County Recycling Center
4	Mulch Loaded Out From TS	County Transfer Station (TS) Scale Records	66,827	Scaled Out As Taken to Mulch Preserve Locations
5	Non-Processibles Recycled**	County TS Scale Out Records	36,782	
6	Non-Processibles Land filled**	County Trans. Stat'n. & Covanta Scale Records	1,643	
7	Loaded on Rail to RRF (MSW burned)	Covanta Scales as Loaded	487,468	Total Tons Loaded on Rail to RRF Net of 7a
7a	Loaded on Rail to RRF (C&D Burned)	County Transfer Station (TS) Scale Records	77,971	In-Bound C&D less Outbound Non-Processibles Landfilled
7b	By-pass (Accepted Processible Land filled)	County TS Scale Out Records	-	
8	Refuse Disposed Out of County	Audited 6-Mo. Hauler Reports	148,296	Private Sector MSW Collection not delivered to CountyTS
9	All Incoming Leaves and Grass	Compost Facility & TS Scale Records	65,393	Includes 0 to Backup Composters
10	Composting Residue to RRF	Covanta Scale Records	-	
11	Ferrous recovered at RRF	Covanta Scale Records	10,853	
12	Ash Loaded to Ash Recycling Contractor	Covanta Scale Records	135,678	
13	Non-Metal Outgoing from Ash Recycler	Allied Monthly Report	112,314	
13a	Non-Metal Outgoing from Ash Recycler (C&D residue)	Allied Monthly Report	23,391	
14	Metals (Fe, Cu, Brass, Coins)	Allied Monthly Report	1,722	
15	All ash not recycled	Covanta Scale Records	31,951	

Recycling Rate Calculations		Numerator	Denominator	Rate
County Recycling Rate "With Ash"	$(1 + 2 + 3 + 4 + 9 - 10 + 11 + 13 + 14) / (\text{CMW} - 5 - 6 - 7a) =$	609,269	1,120,143	54.4%
County Recycling Rate "Without Ash"	$(1 + 2 + 3 + 4 + 9 - 10 + 11 + 14) / (\text{CMW} - 5 - 6 - 7a) =$	496,954	1,120,143	44.4%
State Recycling Rate	$(2 + 3 + 4 + 9 - 10 + 11 + 13 + 14) / (\text{CMW} - 1 - 5 - 6 - 7a) =$	567,121	1,078,736	52.6% ***
State Recycling & Reduction Rate	$(2 + 3 + 4 + 9 - 10 + 11 + 13 + 14) / (\text{CMW} - 1 - 5 - 6) + 5.0\% =$	567,121	1,078,736	57.6%
EPA Recycling Rate	$(2 + 3 + 4 + 9 - 10 + 11 + 14) / (\text{CMW} - 1 - 5 - 6 - 7a) =$	455,547	1,078,736	42.2% ***
Notes:				
** Nonprocessibles are Construction & Demolition-type materials: not eligible for recycling credit, but are County-managed solid waste.				
*** For State and EPA methods, numerator and denominator exclude motor oil and source reduction.				
Nomenclature:	"C&D" means "Construction and Demolition" waste, exclusive of MSW, traditionally managed by the private sector, but much now comes to County TS.			
	"CMW" means "County Management Waste". It includes all MSW, whether or not exported by private sector collectors, but only C&D delivered to TS.			
	"MSW" stands for "Municipal Solid Waste", and represents the waste eligible for recycling under the State recycling law, regulations and guidelines.			
	"TS" stands for the County's "Transfer Station", located in Derwood, Maryland, just south of Gaithersburg.			